June 21, 2002

Mr. Paul Rosomme
EIS Fibercoating, Inc.
616 E. Main Street
Logansport, Indiana 46947

Re: 017-15417-00039
Minor Permit Revision to
FESOP 017-15789-00039

Dear Mr. Rosomme:

EIS Fibercoating, Inc., proposed to apply for a Federally Enforceable State Operating Permit (FESOP) on April 5, 2002 for a flock adhesive coating facility and the FESOP application was submitted on April 30, 2002. An application to modify the source was received on January 14, 2002. Pursuant to 326 IAC 2-8-11.1, the following modifications are approved for construction at the source:

(a) One (1) rubber extrusion and coating line, with a maximum process rate of 1,000 pounds of rubber per hour, including the following:

(1) Two (2) rubber extruders.

(2) Two (2) hot air curing oven, using natural gas as the fuel, with a maximum heat input rate of 7.36 MMBtu per hour for both ovens, and venting through stacks L1-1, L1-2, and L1-3, and L1-4.

(3) Two (2) spray coating booths, applying either flock adhesive or primer and low friction coating in each booth, using HVLP type spray guns, and venting through stacks L1-5 and L1-6, respectively.

(4) One (1) electric infrared drying oven for curing adhesive or coating, and venting through stacks L1-7 and L1-8.

The Minor Permit Revision approval will be incorporated into the pending FESOP permit pursuant to 326 IAC 2-8-11.1. The source may begin construction and operation upon issuance of the permit revision approval.

Pursuant to Contract No. A305-0-00-36, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Yu-Lien Chu, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (919) 468-7871 to speak directly to Ms. Chu. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, press 0 and ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Sincerely,

Original Signed by Paul Dubenetzky
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments
ERG/YC

cc: File - Cass County
Cass County Health Department
Air Compliance Section Inspector - Marc Goldman
Compliance Data Section - Karen Nowak
Administrative and Development - Sara Cloe
Technical Support and Modeling - Michele Boner

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) MINOR PERMIT REVISION OFFICE OF AIR QUALITY

EIS Fibercoating, Inc.
616 East Main Street
Logansport, Indiana 46947

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Minor Permit Revision No.: 017-15417-00039	
Issued by: Original Singed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: June 21, 2002

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SECTION A SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a flock adhesive application facility.

Responsible Official:	Paul Rossomme, President
Source Address:	616 E. Main Street, Logansport, Indiana 46947
Mailing Address:	616 E. Main Street, Logansport, Indiana 46947
General Source Phone Number:	(219) 722-5192
SIC Code:	3069 and 3089
County Location:	Cass
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) pending Minor Source, under PSD Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

(a) One (1) rubber extrusion and coating line, with a maximum process rate of 1,000 pounds of rubber per hour, including the following:

(1) Two (2) rubber extruders.

(2) Two (2) hot air curing oven, using natural gas as the fuel, with a maximum heat input rate of 7.36 MMBtu per hour for both ovens, and venting through stacks L1-1, L1-2, and L1-3, and L1-4.

(3) Two (2) spray coating booths, applying either flock adhesive or primer and low friction coating in each booth, using HVLP type spray guns, and venting through stacks L1-5 and L1-6, respectively.

(4) One (1) electric infrared drying oven for curing adhesive or coating, and venting through stacks L1-7 and L1-8.

A.3 FESOP Permit Applicability [326 IAC 2-7-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to IDEM, OAQ for a FESOP on April 30, 2002.

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.3 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-8-4(11)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.4 Permit No Defense [IC 13]

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.5 Revisions to Permit [326 IAC 2]

All requirements of these construction conditions shall remain in effect unless modified in a manner consistent with procedures established for revisions pursuant to 326 IAC 2.

SECTION C GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-8-3(d)][326 IAC 2-8-4(c)(i)][326 IAC 2-8-5(1)]

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.

(c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

C.2 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(a)] [326 IAC 2-8-5(a)(1)]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) when operation begins, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ, IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

C.3 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-8-5(a)(4)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

Testing Requirements [326 IAC 2-8-4(3)]

C.7 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

(a) Compliance testing on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality

100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.8 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.9 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

If required by Section D, all monitoring and record keeping requirements shall be implemented when operation begins. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

C.10 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.11 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:

(1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.

(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or

(2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.

(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

(4) Failure to take reasonable response steps shall constitute a violation of the permit.

(c) The Permittee is not required to take any further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.

(3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.

(d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.

(e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

(f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.12 Emergency Provisions [326 IAC 2-8-12]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section) or,
Telephone No.: 317-233-5674 (ask for Compliance Section)
Facsimile No.: 317-233-5967

Failure to notify IDEM, OAQ, by telephone or facsimile within four (4) daytime business hours after the beginning of the emergency, or after the emergency is discovered or reasonably should have been discovered, shall constitute a violation of 326 IAC 2-8 and any other applicable rules. [326 IAC 2-8-12(f)]

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

C.13 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.14 General Record Keeping Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-5]

(a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.15 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

(a) The reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

(d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]

(a) One (1) rubber extrusion and coating line, with a maximum process rate of 1,000 pounds of rubber per hour, including the following:

(1) Two (2) rubber extruders.

(2) Two (2) hot air curing oven, using natural gas as the fuel, with a maximum heat input rate of 7.36 MMBtu per hour for both ovens, and venting through stacks L1-1, L1-2, and L1-3, and L1-4.

(3) Two (2) spray coating booths, applying either flock adhesive or primer and low friction coating in each booth, using HVLP type spray guns, and venting through stacks L1-5 and L1-6, respectively.

(4) One (1) electric infrared drying oven for curing adhesive or coating, and venting through stacks L1-7 and L1-8.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 Minor FESOP Revision [326 IAC 2-8-11.1]

Pursuant to 326 IAC 2-8-11.1(d)(5)(A) (Minor Permit Revision):

(a) The total rubber input to the rubber extruders shall not exceed a total of 4,380 tons per twelve (12) consecutive month period. This is equivalent to 8.67 tons per year of VOC emissions and 4.4 tons per year of total HAPs emissions from the rubber extrusion and curing processes

(b) The amount of VOC delivered to the spray coating booths plus the amount of VOC used for clean-up shall be limited to less than 16 tons per twelve (12) consecutive month period.

(c) The amount of any single HAP delivered to the spray coating booths plus the amount of any single HAP used for clean-up shall be limited to less than 10 tons per twelve (12) consecutive month period.

(d) The amount of any combination of HAPs delivered to the spray coating booths plus the amount of any combination of HAPs used for clean-up shall not exceed 20 tons per twelve (12) consecutive month period.

Based on the limitations above, the VOC emissions from the proposed construction project are limited to less than 25 tons per year, and the HAPs emissions from the entire project are limited to less than 10 tons per year for a single HAP and less than 25 tons per year for any combination of HAPs. Therefore, the requirements of 326 IAC 2-4.1(Significant Permit Revision) and 326 IAC 8-1-6 (General Reduction Requirements for New Facilities) are not applicable.

D.1.2 Particulate Matter (PM) [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2(c) (Process Operations), the allowable PM emission rate from the rubber extruders shall not exceed 2.58 pounds per hour when operating at a process weight rate of 1,000 pounds per hour.

(b) Pursuant to 326 IAC 6-3-2(c) (Process Operations), the allowable PM emission rate from the spray coating booths shall not exceed the pounds per hour limitation based on the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

D.1.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility.

Compliance Determination Requirements

D.1.4 VOC and HAP Emissions

(a) Compliance with Condition D.1.1 (a) shall be demonstrated within 30 days of the end of each month based on the total rubber input to the extrusion line for the most recent twelve (12) month period.

(b) Compliance with the VOC and HAPs usage limits in Conditions D.1.1(b), (c), and (d), shall be demonstrated within 30 days of the end of each month based on the total VOC usages for the most recent twelve (12) month period.

D.1.5 Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAPs)

Compliance with the VOC and HAPs usage limitations in Conditions D.1.1(b), (c), (d), shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer.

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.6 Record Keeping Requirements

(a) To document compliance with Condition D.1.1(a), the Permittee shall maintain monthly records of the total weight of rubber input.

(b) To document compliance with Conditions D.1.1(b), (c), and (d), the Permittee shall maintain records in accordance with (1) through (4) below for the spray coating booths. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC and HAPs usage limits established in Conditions D.1.1(b), (c), and (d).

(1) The amount, the HAP content, and the VOC content of each coating and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(2) The cleanup solvent usage for each month;

(3) The total VOC and HAPs usage for each month; and

(4) The weight of VOCs and HAPs usage for each compliance period.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.7 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.1(a), (b), (c), and (d) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter period being reported. The report submitted by the Permittee does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

FESOP PERMIT REVISION CERTIFICATION

Source Name: EIS Fibercoating, Inc.
Source Address: 616 East Main Street, Logansport, Indiana 46947
Mailing Address: 616 East Main Street, Logansport, Indiana 46947
Permit Revision No.: 017-15417-00039

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.

Please check what document is being certified:

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Affidavit (specify) _____

9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

FESOP Quarterly Report

Source Name: EIS Fibercoating, Inc.
Source Address: 616 East Main Street, Logansport, Indiana 46947
Mailing Address: 616 East Main Street, Logansport, Indiana 46947
Permit Revision No.: 017-15417-00039
Facility: Rubber extruders
Parameter: Total rubber input
Limit: Less than 4,380 tons per twelve (12) consecutive month period.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

FESOP Quarterly Report

Source Name: EIS Fibercoating, Inc.
Source Address: 616 East Main Street, Logansport, Indiana 46947
Mailing Address: 616 East Main Street, Logansport, Indiana 46947
Permit Revision No.: 017-15417-00039
Facility: Two (2) spray coating booths
Parameter: VOC input
Limit: Less than 16.0 tons per twelve (12) consecutive month period.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

FESOP Quarterly Report

Source Name: EIS Fibercoating, Inc.
Source Address: 616 East Main Street, Logansport, Indiana 46947
Mailing Address: 616 East Main Street, Logansport, Indiana 46947
Permit Revision No.: 017-15417-00039
Facility: Two (2) spray coating booths
Parameter: Single HAPs input
Limit: Less than 10.0 tons per twelve (12) consecutive month period.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

FESOP Quarterly Report

Source Name: EIS Fibercoating, Inc.
Source Address: 616 East Main Street, Logansport, Indiana 46947
Mailing Address: 616 East Main Street, Logansport, Indiana 46947
Permit Revision No.: 017-15417-00039
Facility: Two (2) spray coating booths
Parameter: Total HAPs input
Limit: Less than 20.0 tons per twelve (12) consecutive month period.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a
Federally Enforceable State Operating Permit Revision

Source Background and Description

Source Name:	EIS Fibercoating, Inc.
Source Location:	616 East Main Street, Logansport, Indiana 46947
County:	Cass
SIC Code:	3069 and 3089
Operation Permit No.:	017-15789-00039
Operation Permit Issuance Date:	Not yet issued
Minor Permit Revision No.:	017-15417-00039
Permit Reviewer:	ERG/YC

The Office of Air Quality (OAQ) has reviewed a permit revision application from EIS Fibercoating, Inc. for the construction and operation of the following emission units and pollution control devices:

(a) One (1) rubber extrusion and coating line, with a maximum process rate of 1,000 pounds of rubber per hour, including the following:

(1) Two (2) rubber extruders.

(2) Two (2) hot air curing oven, using natural gas as the fuel, with a maximum heat input rate of 7.36 MMBtu per hour for both ovens, and venting through stacks L1-1, L1-2, and L1-3, and L1-4.

(3) Two (2) spray coating booths, applying either flock adhesive or primer and low friction coating in each booth, using HVLP type spray guns, and venting through stacks L1-5 and L1-6, respectively.

(4) One (1) electric infrared drying oven for curing adhesive or coating, and venting through stacks L1-7 and L1-8.

History

On January 14, 2002, EIS Fibercoating, Inc., submitted an application to the OAQ requesting to add an additional rubber extrusion line to their existing plant. EIS currently is a Title V major source operating without an operating permit. The source's actual annual emissions are below the Title V major source thresholds; therefore, the source has elected to operate under the FESOP program and submitted a FESOP application on April 30, 2002. The new process lines listed in this Minor Permit Revision will be incorporated into the FESOP.

Enforcement Issue

There are no enforcement actions related to the new units.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (^{0}F)
L1-1	Rubber Curing Oven	21	0.5	300	<400
L1-2	Rubber Curing Oven	21	1.0	1,750	<400
L1-3	Rubber Curing Oven	21	1.0	1,750	<400
L1-4	Rubber Curing Oven	16	0.5	300	<400
L1-5	Spray Coating	16	1.33	3,580	<400
L1-6	Spray Coating	16	1.33	3,580	<400
L1-7	Infrared Oven	16	1.0	2,500	<400
L1-8	Infrared Oven	16	1.0	2,500	<400

Recommendation

The staff recommends to the Commissioner that the FESOP Minor Permit Revision be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on January 14, 2002. Additional information was received on January 30, 2002, March 19, 2002, March 22, 2002, April 5, 2002, April 30, 2002, May 14, 2002, and May 20, 2002.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (pages 1 through 5).

Potential To Emit of Revision

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	8.03
PM-10	8.03
SO_2	0.02
VOC	49.2
CO	2.7
NO_x	3.2

HAP's	Potential To Emit (tons/year)
Carbon Disulfide	2.9
Acetophenone	0.9
Benzene	0.2
O-Xylene	0.2
Toluene	3.2
Xylene	25.5
MDI	0.8
Ethyl Benzene	5.0
Methyl Isobutyl Ketone	6.4
Glycol Ethers	1.9
TOTAL	47.0

Justification for Permit Revision

This revision is being performed pursuant to 326 IAC 2-8-11.1(d)(5)(A). The VOC emissions from the new construction project will be limited to less than 25 tons per year. The HAP emissions will be limited to less than 10 tons per year for a single HAP and less than 25 tons per year for any combination of HAPs. These emission limits will be achieved by limiting the amount of VOC and HAP used in the coating processes. A FESOP is currently being drafted and will limit the emissions from the entire source to less than the Title V major source thresholds.

County Attainment Status

The source is located in Cass County.

Pollutant	Status
PM-10	Attainment
SO_2	Attainment
NO_2	Attainment
Ozone	Attainment
CO	Attainment
Lead	Attainment

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Cass County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) Cass County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

The potential uncontrolled emissions from the existing source:

Pollutant	Emissions (tons/year)
PM	39.0
PM-10	NA
SO_2	NA
VOC	144.9
CO	NA

Pollutant	Emissions (tons/year)
NOx	NA

Note: "NA" means no information is available for PM-10, SO_2, CO, and NOx emissions from the existing source during this review period.

HAP's	Potential To Emit (tons/year)
Ethyl Benzene	16.0
MIBK	13.7
Toluene	7.3
Xylene	50.2
MDI	1.9
Glycol Ethers	2.6
Dibutyl Phthalate	2.6
TOTAL	94.3

(a) This existing source is not a major PSD source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.

(b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of VOC equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(c) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(d) Pursuant to 326 IAC 2-8, this source, otherwise required to obtain a Title V permit, has agreed to accept a permit with federally enforceable limits that restrict PTE to below Title V emission levels. Therefore, this source will be issued a Federally Enforceable State Operating Permit (FESOP).

(e) The source's FESOP is currently being drafted and will contain the limits for the existing units and the proposed process lines in this revision. The FESOP conditions will make the source minor for PSD.

(f) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.

(g) The emission information is based upon the information submitted on March 19, 2002.

Potential to Emit of Revision After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this FESOP Permit Revision.

	Potential to Emit After Issuance (tons/year)						
Process/Facility	PM	PM_{10}	SO_2	VOC	CO	NO_X	HAPs
Rubber Extrusion	Negligible	Negligible	--	0.2	--	--	0.13
Rubber Curing	--	--	--	8.3	--	--	4.3 (No Xylene)
NG Curing Oven	0.24	0.24	0.02	0.2	2.7	3.2	Negligible
Two Spray Coating Booths	7.8	7.8	--	Less than 16.0	--	--	Less than 10 for a single HAP and 20 for combined HAPs
Total Potential to Emit of the Revision	8.0	8.0	0.02	Less than 25	2.7	3.2	Less than 10 for a single HAP and 25 for combined HAPs
Significant Revision Thresholds	25	25	25	25	100	25	10 for a single HAP and 25 for combined HAPs

(a) This permit revision to a FESOP is not major because the emission increase is less than the significant permit revision levels.

(b) A FESOP is currently being drafted and will contain limitations designed to limit the emissions from the entire source to less than the Title V major source thresholds. Therefore, the requirements of 326 IAC 2-7 do not apply.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Rubber Extrusion and Coating Line

326 IAC 2-8-11.1(d) (Minor FESOP Revision)
Pursuant to 326 IAC 2-8-11.1(d)(5)(A):

(a) The total rubber input to the rubber extruders shall not exceed a total of 4,380 tons per twelve (12) consecutive month period. This is equivalent to 8.67 tons per year of VOC emissions and 4.4 tons per year of total HAPs emissions from the rubber extrusion and curing processes.

(b) The amount of VOC delivered to the spray coating booths plus the amount of VOC used for clean-up shall be limited to less than 16 tons per twelve (12) consecutive month period.

(c) The amount of any single HAP delivered to the spray coating booths plus the amount of any single HAP used for clean-up shall be limited to less than 10 tons per twelve (12) consecutive month period.

(d) The amount of any combination of HAPs delivered to the spray coating booths plus the amount of any combination of HAPs used for clean-up shall not exceed 20 tons per twelve (12) consecutive month period.

Based on the limitations above, the VOC emissions from the proposed construction project are limited to less than 25 tons per year, and the HAPs emissions from the entire project are limited to less than 10 tons per year for a single HAP and less than 25 tons per year for any combination of HAPs. Therefore, the requirements of Significant FESOP Revision (326 IAC 2-4.1) are not applicable.

326 IAC 8-1-6 (New Facilities - General Reduction Requirement)

The rubber extruders and the curing ovens do not have potential VOC emissions equal to or greater than twenty five (25) tons per year. The VOC input to both spray coating booths are limited to less than 25 tons per year. Therefore, these facilities are not subject to the provisions of 326 IAC 8-1-6.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The total HAPs emissions from this new construction project are limited to less than 10 tons per year for a single HAP, and less than 25 tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 6-3-2 (Process Operations)

The allowable particulate matter (PM) emission rate from the rubber extruders shall be limited to 2.58 lbs/hr when the process weight rate is 1,000 lbs/hr.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

According to the emission calculations (see Appendix A), the PM emissions from the rubber extrusion process are in compliance with 326 IAC 6-3-2.

326 IAC 6-3-2 (Process Operations)

The allowable particulate matter (PM) emission rate from the spray coating booths shall not exceed the pounds per hour limitation based on the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a

result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

No compliance monitoring requirements are required for those modifications.

Conclusion

The construction and operation of the rubber extrusion line shall be subject to the conditions of the attached proposed FESOP Minor Permit Revision No. 017-15417-00019.

Appendix A: Emission Calculations
VOC, PM, and HAP Emissions
From the Rubber Extrusion Process

Company Name: EIS Fibercoating, Inc.
Address City IN Zip: 616 E. Main Street, Logansport,IN 46947
Permit #: 017-15417-00039
Reviewer: ERG/YC
Date: May 15, 2002

Type of The Rubber: Compound #8: EPSM1 (EPDM Sulfur Cure)
Maximum Process Rate: 1000 lb/hr

Pollutants	*Emission Factor (lb/lb rubber)	Potential Emission (lb/hr)	Potential Emission (tons/yr)
Total VOC	3.95E-05	3.95E-02	**0.17**
Total PM/PM10	2.67E-08	2.67E-05	**1.17E-04**
HAPs			
1,1-Dichloroethene	5.37E-08	5.37E-05	2.35E-04
1,3-Butadiene	6.04E-08	6.04E-05	2.65E-04
2-Butanone	2.72E-07	2.72E-04	1.19E-03
4-Methyl-2-Pentanone	6.80E-08	6.80E-05	2.98E-04
Acetophenone	6.91E-09	6.91E-06	3.03E-05
Acrylonitrile	3.65E-08	3.65E-05	1.60E-04
Aniline	4.13E-09	4.13E-06	1.81E-05
Carbon Disulfide	1.50E-05	1.50E-02	0.066
Carbonyl Sulfide	1.20E-05	1.20E-02	0.053
Chloromethane	2.00E-08	2.00E-05	8.76E-05
Chromium (Cr) Compounds	2.72E-10	2.72E-07	1.19E-06
Cumene	5.17E-08	5.17E-05	2.26E-04
Di-n-butylphthalate	4.00E-09	4.00E-06	1.75E-05
Ethylbenzene	5.93E-08	5.93E-05	2.60E-04
Hexane	6.84E-07	6.84E-04	3.00E-03
Isooctane	1.32E-07	1.32E-04	5.78E-04
m-Xylene + p-Xylene	2.33E-07	2.33E-04	1.02E-03
Methylene Chloride	2.58E-07	2.58E-04	1.13E-03
Naphthalene	1.46E-08	1.46E-05	6.39E-05
Nickel (Ni) Compounds	2.08E-09	2.08E-06	9.11E-06
o-Xylene	8.30E-08	8.30E-05	3.64E-04
Phenol	1.71E-08	1.71E-05	7.49E-05
Styrene	2.21E-08	2.21E-05	9.68E-05
Tetrachloroethene	4.15E-08	4.15E-05	1.82E-04
Toluene	7.05E-07	7.05E-04	3.09E-03
Total HAPs		**0.03**	**0.13**

*Emission Factors are adapted from AP-42, Chapter 4.12, Tables 4.12-6: Extruder Emission Factor. (draft - Dec, 1997)

Methodology
Potential Emission (lb/hr) = Maximum Process Rate (lb/hr) x Emission Factor (lb/lb)
Potential Emission (tons/yr) = Potential Emission (lb/hr) x 8760 (hr/yr) x (1 ton/2000 lb)

Appendix A: Emission Calculations
VOC and HAP Emissions
From the Rubber Curing Process

Company Name: EIS Fibercoating, Inc.
Address City IN Zip: 616 E. Main Street, Logansport,IN 46947
Permit #: 017-15417-00039
Reviewer: ERG/YC
Date: May 15, 2002

Type of The Rubber: Compound #8: EPSM1 (EPDM Sulfur Cure)
Maximum Process Rate: 1000 lb/hr

Pollutants	*Emission Factor (lb/lb rubber)	Potential Emission (lb/hr)	Potentail Emission (tons/yr)
Total VOC	1.90E-03	1.90E+00	**8.32**
Total PM/PM10	-	-	-
HAPs			
1,3-Butadiene	1.24E-06	1.24E-03	5.43E-03
Acetophenone	2.13E-04	2.13E-01	0.933
Aniline	1.48E-07	1.48E-04	6.48E-04
Benzene	4.88E-05	4.88E-02	0.214
Biphenyl	3.92E-07	3.92E-04	1.72E-03
bis(2-Ethylhexyl)phthalate	2.74E-07	2.74E-04	1.20E-03
Carbon Disulfide	6.43E-04	6.43E-01	2.816
Cumene	8.08E-08	8.08E-05	3.54E-04
Dibenzofuran	2.10E-06	2.10E-03	9.20E-03
Dimethylphthalate	3.19E-08	3.19E-05	1.40E-04
Hexane	3.13E-06	3.13E-03	0.014
m-Xylene	1.33E-06	1.33E-03	5.83E-03
Methylene Chloride	3.61E-06	3.61E-03	0.016
Naphthalene	1.07E-06	1.07E-03	4.69E-03
o-Xylene	4.92E-05	4.92E-02	0.215
p-Xylene	2.95E-06	2.95E-03	0.013
Phenol	3.41E-07	3.41E-04	1.49E-03
Styrene	4.25E-07	4.25E-04	1.86E-03
Toluene	4.37E-06	4.37E-03	0.019
Total HAPs		**0.98**	**4.27**

*Emission Factors are adapted from AP-42, Chapter 4.12, Tables 4.12-10: Hot Air Cure Emission Factor. (draft - Dec, 1997)

Methodology
Potential Emission (lb/hr) = Maximum Process Rate (lb/hr) x Emission Factor (lb/lb)
Potential Emission (tons/yr) = Potential Emission (lb/hr) x 8760 (hr/yr) x (1 ton/2000 lb)

Appendix A: Emission Calculations
Natural Gas Combustion
(MMBtu/hr < 100)
From the Two (2) Rubber Curing Ovens

Company Name: EIS Fibercoating, Inc.
Address City IN Zip: 616 E. Main Street, Logansport,IN 46947
Permit #: 017-15417-00039
Reviewer: ERG/YC
Date: May 15, 2002

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
7.36	64.5

	Pollutant					
	PM*	PM10*	SO2	**NO_x	VOC	CO
Emission Factor in lb/MMCF	7.6	7.6	0.6	100	5.5	84.0
Potential Emission in tons/yr	**0.24**	**0.24**	**1.9E-02**	**3.22**	**0.18**	**2.71**

*PM and PM10 emission factors are condensable and filterable PM10 combined.
**Emission Factors for NO_x: Uncontrolled = 100, Low NO_x Burner = 50, Low NO_x Burners/Flue gas recirculation = 32

Methodology

All Emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF - 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (AP-42 Supplement D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Appendix A: Emission Calculations
VOC and PM Emissions
From Two (2) Coating Booths

Company Name: EIS Fibercoating, Inc.
Address City IN Zip: 616 E. Main Street, Logansport,IN 46947
Permit #: 017-15417-00039
Reviewer: ERG/YC
Date: May 20, 2002

1. Total VOC and PM emissions for each coating booth when applying flock adhesive

Material	Density (Lb/Gal)	Weight % Volatile (H_2O & Organics)	Weight % Water	Weight % Organics	Maximum (gal/hour)	Pounds VOC per gallon of coating	Potential VOC (lbs/hr)	Potential VOC (tons/yr)	*PM/PM10 Potential (lb/hr)	*PM/PM10 Potential (ton/yr)	Transfer Efficiency
Flocklok 852	8.29	48.3%	0.0%	48.3%	0.57	4.00	2.28	10.00	0.86	3.75	65%
Chemglaze Catalyst	7.25	90.4%	0.0%	90.4%	0.14	6.55	0.92	4.02	0.03	0.15	65%
Total								**14.02**	**0.89**	**3.89**	

* Assume all the PM emissions are PM10 emissions.

2. Total VOC and PM emissions for each coating booth when applying primer

Material	Density (Lb/Gal)	Weight % Volatile (H_2O & Organics)	Weight % Water	Weight % VOC	Maximum Usage (gal/hour)	Pounds VOC per gallon of coating	Potential VOC (lbs/hr)	Potential VOC (tons/yr)	*PM/PM10 Potential (lb/hr)	*PM/PM10 Potential (ton/yr)	Transfer Efficiency
Primer	7.28	96.40%	0.0%	96.4%	0.500	7.02	3.51	15.37	0.05	0.20	65%
Basecoat 8370A	8.91	71.00%	50.0%	21.0%	0.475	1.87	0.89	3.89	0.43	1.88	65%
Catalyst 8370C	8.91	100.00%	0.0%	100.0%	0.025	8.91	0.22	0.98	0.00	0.00	65%
Total								**20.24**	**0.48**	**2.08**	

* Assume all the PM emissions are PM10 emissions.

3. Total uncontrolled emissions for both coating booths (worst-case senario):

Pollutants	Worst-case Senario	Emissions for each (ton/yr)	Total Emissions (tons/yr)
VOC	primer	20.24	**40.48**
PM/PM10	flock adhsive	3.89	**7.79**

METHODOLOGY

Weight % VOC = Weight % Volatile - Weight % Water
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % VOC)
Potential VOC (lbs/hr) = Pounds VOC per Gallon coating (lb/gal) * Maximum Usage (gals/hr)
Potential VOC (tons/yr) = Pounds VOC per Gallon coating (lb/gal) * Maximum Usage (gal/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Potential PM/PM10 (lbs/hr) = Max. Usage (gal/hr) * Density (lbs/gal) * (1- Weight % Volatile) * (1-Transfer efficiency)
Potential PM/PM10 (tons/yr) = Max. Usage (gal/hr) * Density (lbs/gal) * (1- Weight % Volatile) * (1-Transfer efficiency) * (8760 hrs/yr) *(1 ton/2000 lbs)
Total Emissions = Emissions for each (ton/yr/booth) x 2 booths

Appendix A: Emission Calculations
HAP Emissions
From Two (2) Coating Booths

Company Name: EIS Fibercoating, Inc.
Address City IN Zip: 616 E. Main Street, Logansport,IN 46947
Permit #: 017-15417-00039
Reviewer: ERG/YC
Date: May 20, 2002

1. Total HAPs emissions for each coating booth when applying flock adhesive

Material	Density (Lb/Gal)	Maximum (gal/hour)	Weight % 4,4-Methylenediphenyl Diisocyanate	4,4-Methylenediphenyl Diisocyanate Emissions (tons/yr)	Weight % Ethyl Benzene	Ethyl Benzene Emissions (tons/yr)	Weight % Methyl Isobutyl Ketone	Methyl Isobutyl Ketone Emissions (tons/yr)	Weight % Xylene	Xylene Emissions (tons/yr)	Weight % Toluene	Toluene Emissions (tons/yr)
Flocklok 852	8.29	0.57	2.0%	0.41	10.0%	2.06	10.0%	2.06	25.0%	5.16	0.0%	
Chemglaze Catalyst	7.25	0.14	0.0%		10.0%	0.45	20.0%	0.90	30.0%	1.35	35.0%	1.58
Total				**0.41**		**2.51**		**2.96**		**6.51**		**1.58**

2. Total HAPs emissions for each coating booth when applying primer

Material	Density (Lb/Gal)	Maximum Usage (gal/hour)	Weight % Ethyl Benzene	Ethyl Benzene Emissions (tons/yr)	Weight % Xylene	Xylene Emissions (tons/yr)	Weight % Glycol Ethers	Glycol Ethers Emissions (tons/yr)
Primer	7.28	0.500	20.0%	3.19	80.0%	12.75	0.0%	0.00
Basecoat 8370A	8.91	0.475	0.0%	0.00	0.0%	0.00	5.0%	0.93
Catalyst 8370C	8.91	0.025	0.0%	0.00	0.0%	0.00	0.0%	0.00
Total				**3.19**		**12.75**		**0.93**

3. Total uncontrolled emissions for both coating booths (worst-case senario):

HAPs	4,4-Methylenediphenyl Diisocyanate Emissions (tons/yr)	Ethyl Benzene Emissions (tons/yr)	Methyl Isobutyl Ketone Emissions (tons/yr)	Xylene Emissions (tons/yr)	Toluene Emissions (tons/yr)	Glycol Ethers Emissions (tons/yr)	**Total HAPs (tons/yr)**
For each booth	0.41	2.51	3.19	12.75	1.58	0.93	
Total 2 both booths	**0.82**	**5.03**	**6.38**	**25.51**	**3.16**	**1.85**	**42.75**

METHODOLOGY

HAPs emission rate (tons/yr) = Density (lb/gal) x Maximum (gal/hr) x Weight % HAP x 8760 hr/yr x 1 ton/2000 lbs